

$^{11}\text{B}(\text{n},\text{n}'\gamma)$     **1972Ni05**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu		NP A880, 88 (2012)	1-Jan-2011

1970Al08:  $^{11}\text{B}(\text{n},\text{n}),(\text{n},\text{n}')$  E=14.1 MeV, measured  $\sigma(E_{N'},\theta)$ .

1970Co12:  $^{11}\text{B}(\text{n},\text{n}),(\text{n},\text{n}')$  E=9.72 MeV, measured  $\sigma(E_{N'},\theta)$ .

1972Ni05:  $^{11}\text{B}(\text{N},\text{N}'\gamma)$  E=fission spectrum, measured  $\sigma(E_\gamma)$ .  $^{11}\text{B}$  deduced levels, J,  $\pi$ ,  $\gamma$ -branching.

1974Hy01:  $^{11}\text{B}(\text{n},\text{n}),(\text{n},\text{n}')$  E=14.1 MeV, measured  $\sigma(E_{N'},\theta)$ . Deduced optical parameters.

1982Gl02:  $^{11}\text{B}(\text{n},\text{n}),(\text{n},\text{n}')$  E=8, 9, 9.7, 9.9, 11-14 MeV, measured  $\sigma(\theta)$ . Deduced integrated  $\sigma(E)$ .

1983Ko03:  $^{11}\text{B}(\text{n},\text{n}),(\text{n},\text{n}')$  E=4.8-7.6 MeV, measured  $\sigma(\theta)$ . R-matrix analysis.

1984El12:  $^{11}\text{B}(\text{N},\text{N}'\gamma)$  E=fast, measured DSA.  $^{11}\text{B}$  levels deduced  $T_{1/2}$ .

1989Ge09:  $^{11}\text{B}(\text{N},\text{N}'\gamma)$  E=fast, measured  $\gamma$ -spectra, DSA.  $^{11}\text{B}$  level deduced  $T_{1/2}$ , B( $\lambda$ ).

1995Xi06:  $^{11}\text{B}(\text{n},\text{n}')$  E=7.54-20 MeV, analyzed  $\sigma(\theta)$ ,  $\sigma(E)$ . Deduced model parameters. Microscopic DWBA.

 $^{11}\text{B}$  Levels

E(level)	$J^\pi$	$T_{1/2}$	Comments
0			
$2.12 \times 10^3$	4.3 fs 14		E(level): resolved In (1970Co12, 1970Al08, 1972Ni05, 1974Hy01). $\Gamma$ : from DSAM: (1984El12).
$4.44 \times 10^3$	0.97 fs 6		E(level): resolved In (1970Co12, 1970Al08, 1972Ni05, 1974Hy01). $\Gamma$ : from DSAM: (1984El12).
$5.02 \times 10^3$	3/2 <sup>-</sup>		E(level): resolved In (1970Co12, 1972Ni05, 1974Hy01). $J^\pi$ from (1970Al08).
$6.74 \times 10^3$			E(level): observed In (1970Co12, 1970Al08, 1972Ni05, 1974Hy01). E(level): Unresolved.
$6.79 \times 10^3$			E(level): observed In (1970Co12, 1970Al08, 1972Ni05, 1974Hy01). E(level): Unresolved.
$7.29 \times 10^3$			E(level): resolved In (1970Co12, 1970Al08, 1972Ni05).
7987			
8572			
8919			

 $\gamma(^{11}\text{B})$ 

$E_\gamma$	$I_y^\dagger$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	$E_\gamma$	$I_y^\dagger$	$E_i(\text{level})$	$J_i^\pi$	$E_f$
$2.12 \times 10^3$	100	$2.12 \times 10^3$		0		$5.02 \times 10^3$	80	$5.02 \times 10^3$	3/2 <sup>-</sup>	0
$2.27 \times 10^3$	10	$7.29 \times 10^3$		$5.02 \times 10^3$	3/2 <sup>-</sup>	5867	50	7987		$2.12 \times 10^3$
$2.30 \times 10^3$	30	$6.74 \times 10^3$		$4.44 \times 10^3$		6452	30	8572		$2.12 \times 10^3$
$2.85 \times 10^3$	5	$7.29 \times 10^3$		$4.44 \times 10^3$		$6.74 \times 10^3$	70	$6.74 \times 10^3$		0
$2.90 \times 10^3$	20	$5.02 \times 10^3$	3/2 <sup>-</sup>	$2.12 \times 10^3$		$6.79 \times 10^3$	75	$6.79 \times 10^3$		0
3552	10	8572		$5.02 \times 10^3$	3/2 <sup>-</sup>	$7.29 \times 10^3$	85	$7.29 \times 10^3$		0
4132	10	8572		$4.44 \times 10^3$		7987	50	7987		0
$4.44 \times 10^3$	100	$4.44 \times 10^3$		0		8572	50	8572		0
4479	4	8919		$4.44 \times 10^3$		8919	96	8919		0
$4.67 \times 10^3$	25	$6.79 \times 10^3$		$2.12 \times 10^3$						

<sup>†</sup> From (1972Ni05).

